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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,369	09/25/2003	Horst Schnoerer	11884-406801	3373
53000 KENYON & K	7590 04/14/200 ENYON LLP	EXAMINER		
1500 K STREE	T N.W.	SHUMATE, PAUL W		
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
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			04/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/669,369	SCHNOERER ET AL.	
Office Action Summary	Examiner	Art Unit	
	PAUL SHUMATE	3693	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on 15 J This action is FINAL . 2b) ☑ This Since this application is in condition for allowed closed in accordance with the practice under the second se	s action is non-final. ance except for formal matters, pro		
Disposition of Claims			
4) Claim(s) 1-29 is/are pending in the application 4a) Of the above claim(s) 1-4 and 10-14 is/are 5) Claim(s) is/are allowed. 6) Claim(s) 5-9 and 15-29 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	e withdrawn from consideration.		
Application Papers			
9) The specification is objected to by the Examina 10) The drawing(s) filed on is/are: a) accomposed as a composition and a composition and a composition to the separatement drawing sheet(s) including the correct and the control of the con	cepted or b) objected to by the lead rawing(s) be held in abeyance. Section is required if the drawing(s) is objection	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documen 2. ☐ Certified copies of the priority documen 3. ☐ Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received au (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate	

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DETAILED ACTION

Status of Claims

- 1. This action is in reply to the communication filed on 1/15/2009.
- 2. Claims 1-4 and 10-14 have been withdrawn from consideration.
- 3. Claims 5, 15, and 23 have been amended by Applicant.
- 4. New claims 24-29 have been added by Applicant.
- 5. Claims 5-9 and 15-29 have been examined and currently stand rejected.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 24-26, the following limitation is vague and indefinite:

 a pointer to the entry in the reference budget database points to all of the nodes in at least one of the different levels

It is unclear how one pointer (which by definition can just point at one object at a time) can point to multiple different nodes.

As per claims 27-29, the following limitation is vague and indefinite:

• the pointers to the entries in the working budget database to retrieve working budget values are also <u>applied</u> to the reference budget database <u>to retrieve</u> reference budget values

It is unclear how a pointer can "be applied" to something in order to "retrieve reference budget values." Generally, a pointer can point at one thing and that is pretty much all it does. It is unclear what

"applying" a pointer is/does. It is also unclear how "applying" a pointer can now enable the pointer to "retrieve values" as well. As stated, a pointer can point at something and not much else. It keeps track of just that one something and when necessary, it inherently tells other objects/functions where the value is that they may be looking for.

Clarification and correction are requested.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim(s) 5-9 and 15-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Zawadzki et al., U.S. Patent No.: 7,107,268, in view of <u>Using Microsoft Excel 97</u>, by Hallberg, Bruce A., Sherry Kinkoph, and Bill Ray (hereinafter UME), further in view of Nakayama, U.S. Patent No. 5,317,504.

As per claims 5, 15, and 23, Zawadzki teaches a system and method for managing enterprise operations directed toward a centralized, automated, self-maintained, collaborative project management system which manages project management objects in a hierarchical tree, comprising:

- iteratively receiving a budget item, at the computer system, for entry into the working budget database, wherein the budget item is represented by a value; (see at least column 40 lines 21-26, column 41 lines 56-60, and column 45 lines 16-18)
- executing, by a rules manager, one or more rules stored in a rules array data structure, which compare budget entries between a working budget and a reference budget, which includes a definition of a test relationship between the entries in the working budget and the entries in the reference budget and a definition of a response that is a function of the test relationship, (see at least column 3 lines 40-41, column 3 lines 45-46, column 3 lines 62-65, column 9

lines 19-24, column 10 lines 34-37, column 10 line 48, column 10 lines 56-57, column 10 line 59, column 22 lines 56-62, column 40 lines 1-51, column 41 lines 52-61, and column 65 lines 9-11)

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- determining the result of the test relationship between the entry from the working budget database and the entry from the reference budget database being compared, and outputting a response defined by the response definition; (see at least column 3 lines 40-41, column 3 lines 45-46, column 3 lines 62-65, column 9 lines 19-24, column 10 lines 34-37, column 10 line 48, column 10 lines 56-57, column 10 line 59, column 22 lines 56-62, column 40 lines 1-51, column 41 lines 52-61, and column 65 lines 9-11)
- if any rule generates an error response according to the response definition, blocking the budget item from being saved to the working budget database; and otherwise, saving the received budget item in the working budget database (see at least column 10 lines 34-35, column 10 lines 55-68, and column 41 lines 52-60)

More specifically, Zawadzki teaches a rule processor and a compatibility engine which read a set of rules defined by an industry expert (see at least column 3 lines 40-41, column 3 lines 45-46, column 9 lines 19-24, and column 11 lines 16-18) and apply them against a first (source) project management object (see at least column 10 line 48) and a second (target) project management object (see at least column 10 line 59) where typical project management objects include, inter alia, organizational entities such as projects, budgets, tasks, costs, timesheets, and specs (see at least column 3 lines 62-65, column 22 lines 56-62, and column 65 lines 9-11). Zawadzki further provides examples of comparing overall budgets, allocation budgets, and actual cost budgets to determine responses regarding whether or not a specific entry can be accepted into a budget as valid or not and how much a specific area is over or under budget (see at least column 10 lines 34-37, column 10 lines 56-57, column 40 lines 7-9, and column 41 lines 52-61). Zawadzki also teaches building a question/rule list, defining responses to the questions/rules, and applying such questions/rules to relevant components arranged in an hierarchal tree structure (see at least Figure 2C, column 10 lines 12-13, and column 12 lines 4-62), determining which rules from the set/list of rules are applicable to apply to the objects in the tree structure (see at least

column 9 lines 19-24 and column 10 lines 39-45), and then applying the appropriate rules to relevant components (see at least Fig 2C).

While Zawadzki does disclose using pointers (see at least column 14 lines 21-23), test relationships (see at least column 40 lines 8-9, column 40 lines 34-36, and column 41 lines 43-52), and defined responses which depend on test relationship results (see at least column 40 lines 42-47, column 41 lines 11-21, and column 41 lines 56-58), Zawadzki does not explicitly teach that the rules themselves *include pointers* to entries within the working and reference budgets.

UME, however, teaches conditional rules used in analyzing budget items where the rules include *pointers* to both working and reference budget items, a definition of a test relationship, and a definition of a response to be made when the test relationship is not satisfied (see at least UME p. 204, paragraph(s) under IF, pp. 460-465, paragraph(s) under Validating User Input, and p. 216, paragraph(s) under Conditional Sum Wizard).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teachings of Zawadzki and UME to form a budget management system which executes one or more rules on data, pointed to by a pointer, where the rule includes a conditional test and defined responses, which depend on the test results, because the use of pointers to reference database entries is old and well known and because the use of pointers helps avoid storing information twice in two places (see at least column 14 lines 21-26).

Regarding the limitation and arguments about the working budget database, the reference budget database, and the rules array all being stored separately, the examiner does not interpret specifying that the databases are stored separately to significantly distinguish the claims from the prior art. First, the examiner points to Applicant's own specification. In the second paragraph under <u>Detailed Description</u>, Applicant states that "reference to 'databases' merely connotes logically separate areas of a storage system; it is immaterial, for example, whether the working and reference budgets are provided in physically separate database systems or are merely different portions of a single database system." Further, Webster's II Dictionary, 3rd ed., defines database as "a collection of data arranged for ease or search and retrieval." Any database could be considered to be stored separately from other databases

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regardless if it is physically stored miles away from other databases or if it is stored in a single column in an excel sheet with another database stored one column over. Even the databases that are side by side in an excel sheet are still in two logically different locations, even if the two logically different locations are part of a bigger single database. Therefore based on Applicant's disclosure and the explained interpretation, the examiner believes that both Zawadzki and UME sufficiently teach databases stored in at least logically different locations since the reference budget, the target budget, and the rules list are all individual entities that interact with each other.

However, it is true that neither Zawadzki or UME explicitly state the words that the reference budget, the target budget, and the rules list are stored in *separate data storage areas*. Nakayama, in art very similar to the teachings of Zawadzki, teaches a database module db is constituted by records making up an item dictionary which stores data processed as needed by a command module to analyze/compare/process two or more other individual modules (see at least column 13 lines 20-24, column 14 lines 44-47, and column 14 lines 63-68). In Nakayama, many various independent modules can be applied to each other to then be applied as a whole to other modules or databases (see at least column 14 lines 44-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to specifically store various objects and database in their own modules that are separate but can be applied to each other in various ways to create and execute different functionalities because this permits anyone with little knowledge of computer systems to easily create and execute one program after another as needed. Because the commands function in the order in which they are arranged, the complexity associated with conventional loop control arrangements is significantly alleviated (see at least column 18 lines 39-44).

As per claims 6,7, Zawadzki, in at least column 25 lines 15-24, column 38 lines 36-48, column 41 lines 11-21, column 41 lines 52-60, and column 43 lines 45-56, teaches:

pursuant to execution of a rule, performing aggregation of addressed entries of the working database according to a definition provided in the rule, an aggregate value obtained therefrom being used to determine if the test relationship is satisfied. pursuant to execution of a rule, performing aggregation of addressed entries of the reference database, according to a definition provided in the rule, an aggregate value obtained therefrom being used to determine if the test relationship is satisfied.

In addition to the teachings of Zawadzki, as cited above, teachings relevant to these limitations can be found in UME on at least page 203, paragraph(s) under COUNT, COUNTBLANK, AND COUNTIF, page 208, paragraph(s) under SUM & SUMIF, and page 216, paragraph(s) under Conditional Sum Wizard.

As per claims 8 and 16, UME further teaches:

• if any rule generates a warning, posting an alert as specified in the response definition of the corresponding rule. (see at least UME p. 463-465, paragraph(s) under Setting Error Alerts and FIG. 19.13)

As per claim 9 and 17, Zawadzki further teaches:

- identifying elements within the working budget database that are to be changed by the new budget item, (see at least Figure 2C, column 4 lines 42-47, column 23 lines 8-10, and column 25 lines 15-24)
- identifying rules for which the identified elements are operands, (see at least Figure 2C, column 9 lines 19-24, column 10 lines 40-45, and column 25 lines 15-24)
- wherein the executing causes only the identified rules to be executed. (see at least Figure
 2C, column 9 lines 19-24, column 10 lines 40-45, and column 25 lines 15-24)

As per claim 18, UME, in at least p. 204, paragraph(s) under IF, pp. 460-465, paragraph(s) under Validating User Input, and p. 216, paragraph(s) under Conditional Sum Wizard, teaches:

- identifying, by using an address field, locations from a first and second budget database from which budget value information is to be obtained (UME p.204 see "C10" and "D10")
- storing in a test field a definition of a relationship that must be met between values from the first data structure and values from the second data structure to satisfy the rule (UME p.204 see "C10>D10")

• storing in a response field a definition of an action to occur if the relationship is not satisfied

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(UME p.204 see "Overspent")

As per claims 19 and 20 Zawadzki, in at least column 14 lines 21-25, and UME, in at least p.204,

"C10" and "D10," and pages 467-469, paragraph(s) under Applying Range Names and Defining Label

Ranges, and additionally on pages 410, 415, and 876, further teach:

addressing nodes of the first budget database using a first address pointer,

• addressing nodes of the reference budget database using a second address pointer.

Referencing both the first and second budgets using address pointers contained in function

fields

As per claim 21, Zawadzki teaches applying a rule recursively across a plurality of sets of

locations (see at least the "financial rollup component" in column 25 lines 15-25)

As per claim 22, UME teaches accessing a field for definition of an aggregation rule contained in

at least one rule to the locations specified in the respective address field (see at least page(s) 410, 609,

and 876)

As per claims 24-29, Zawadzki teaches a rule being applied to a single object or tree node and

then because that node pointed to and depended on at least one other node, the rule was then applied to

at least one more associated/affected node. (see at least column 25 lines 5-24, column 41 lines 36-37,

and column 41 lines 52-60)

Response to Arguments

Applicant's arguments filed 06/16/2008 have been fully considered but they are either moot in

view of the new ground(s) of rejection or they are not persuasive.

Regarding the arguments and limitations about the working budget database, the reference

budget database, and the rules array all being stored separately, the examiner does not interpret

specifying that the databases are stored separately to significantly distinguish the claims from the prior

art. First, the examiner points to Applicant's own specification. In the second paragraph under Detailed

Description, Applicant states that "reference to 'databases' merely connotes logically separate areas of a

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storage system; it is immaterial, for example, whether the working and reference budgets are provided in physically separate database systems or are merely different portions of a single database system." Further, Webster's II Dictionary, 3rd ed., defines database as "a collection of data arranged for ease or search and retrieval." Any database could be considered to be stored separately from other databases regardless if it is physically stored miles away from other databases or if it is stored in a single column in an excel sheet with another database stored one column over. Even the databases that are side by side in an excel sheet are still in two logically different locations, even if the two logically different locations are part of a bigger single database. Therefore based on Applicant's disclosure and the explained interpretation, the examiner believes that both Zawadzki and UME sufficiently teach databases stored in at least logically different locations since the reference budget, the target budget, and the rules list are all individual entities that interact with each other.

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However, it is true that neither Zawadzki or UME explicitly state the words that the reference budget, the target budget, and the rules list are stored in *separate data storage areas*. Nakayama, in art very similar to the teachings of Zawadzki, as shown above, teaches each database and list to be stored individually as its own individual module that can be applied with or to other modules to perform different functions and processing tasks (see at least column 13 lines 20-24, column 14 lines 44-47, and column 14 lines 63-68). Therefore the arguments are also moot in view of the new ground(s) of rejection.

Applicant further argues that "the Office specifically states that Zawadzki does not disclose rules' and therefore it is unclear how Zawadzki now recites the features of the rules." The examiner respectfully disagrees and asserts that Zawadzki clearly does disclose rules as shown above and through out Zawadzki's disclosure. The examiner also clarifies that in the Office Action dated 3/17/2008, the examiner clearly states on page 4 bullet 2 that Zawadzki teaches "executing one or more rules on the item for entry (see at least column 40 lines 34-47 an column 41 lines 52-60)." What the examiner does admit to is that "while Zawadzki does disclose using pointers (see at least column 14 lines 21-23), test relationships (see at least column 40 lines 8-9, column 40 lines 34-36, and column 41 lines 43-52), and defined responses which depend on test relationship results (see at least column 40 lines 42-47, column

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41 lines 11-21, and column 41 lines 56-58), Zawadzki does not explicitly" disclose the rules to specifically

include pointers pointing to entries in the working and reference budget databases.

9. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Paul Shumate whose telephone number is 571-270-1830. The examiner can normally be

reached on M-F 8:30 AM - 6:00 PM, EST alt Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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1000.

Name: Title:

Paul W. Shumate Patent Examiner

Date:

4/13/09

Signature:

/Paul Shumate/

Examiner, Art Unit 3693

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Supervisory Patent Examiner, Art Unit 3693